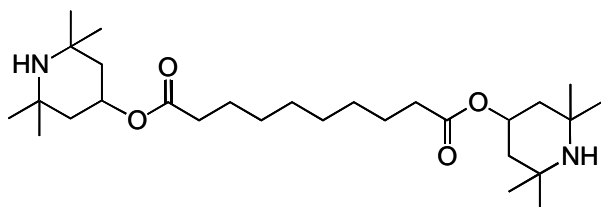


September 15, 2009

ADK STAB LA-77Y ADK STAB LA-77G

— Hindered Amine Light Stabilizer —

Identification



[CAS Number]

52829-07-9

[Chemical Name]

Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidyl) ester

[Formula]

$C_{28}H_{52}N_2O_4$

[Molecular Weight]

481

Features

- Is a very common low molecular N-H-type HALS.
- Provides excellent weatherability (light stability) to a wide variety of polymers, especially thick molded article.
- Shows a synergistic effect when used in combination with UV absorbers.

Applications

- Polyolefin resins such as PP and PE.
- Styrene resins such as PS and ABS.
- PA, POM, PMMA, PVC, Elastomers, etc.

Physical and chemical properties

- Appearance LA-77Y: White powder
LA-77G: White granule
- Melting Point 82 - 87 °C
- Thermal stability (TGA, 10°C/min, Air 200ml/min) 10% weight loss temperature: 273°C
- Solubility (g/100g solvent at 25 °C) Benzene:46, Chloroform:45,
Hexane:5, Methanol: 38
(mg/l solvent at 21.5 °C) Water: < 0.1

* Above value of properties are just typical, not specific

Performance

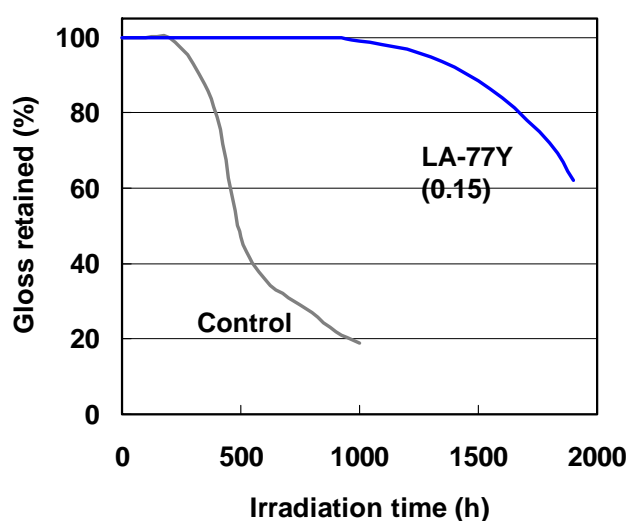
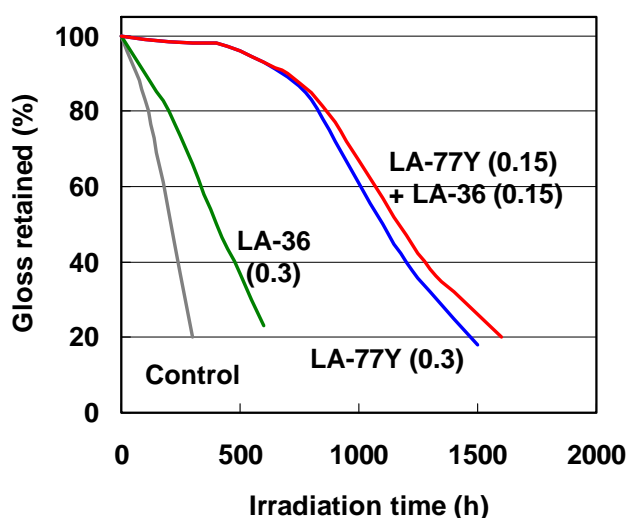


Fig.1 Weatherability of PP-b (Surface gloss)

Fig.2 Weatherability of HDPE (Surface gloss)

[Formulation] Block PP/ AO-60/ Ca-St
= 100/ 0.1/ 0.05
[Plaque] 1mm thick
[Test] Sunshine weathermeter, 63°C

[Formulation] HDPE/ LA-77Y=100 / 0.15 or 0
[Plaque] 1mm thick
[Test] Sunshine weathermeter, 63°C

*LA-36: Benzotriazole UVA, CAS No. 3896-11-5

*Control: without UVA and HALS

Handling and storage

- Store in the original container securely under cool and dry condition.
- Protective clothing should be worn when operators are handling, or being exposed to, this product. See the MSDS for further detailed advice.